

It will be seen from this brief sketch that although the difficult engineering problem of the distribution of the pressure of the wind on large structures is not solved, yet when the investigation on the lateral extent of gusts which is now in progress is completed, the only further information which the designer will need is that of the maximum wind velocity which is likely to obtain on the site of the proposed structure.

T. E. STANTON.

BRITISH MUSEUM GUIDE TO INSECTS.¹

THE publication of this work furnishes a delightful companion to the charming and highly instructive series of insects exhibited in the gallery of the Museum of Natural History. To the naturalist as well as to the layman this exhibition of the bionomics of the Insecta is a living expression of the incessant

terest from agricultural or horticultural points of view have been chosen.

The guide is embellished with a number of full-page illustrations, in addition to the numerous figures in the text. With one or two exceptions these have been specially prepared from specimens in the museum, and they help us to an understanding of the text which renders them practically indispensable. In the classification of the Insecta, nine orders are represented in the following sequence:—Aptera, Orthoptera, Neuroptera, Trichoptera, Lepidoptera, Hymenoptera, Diptera, Coleoptera, and Rhynchota. A diagram is given showing the relationship which is believed to exist between these groups, and representatives of a great number of suborders and families are described. Attention is directed to the fact that the guide refers only to the small representative series of insects exhibited in the public gallery; the main collection, which is reserved for the purpose of study in the basement of the institution, contains 1,150,000 specimens, and comprises about 155,000 named species, occupying 13,000 drawers and 602 store boxes. This enormous collection is always available for study, and students at all times receive every attention and assistance at the hands of those who are in charge of the various departments.

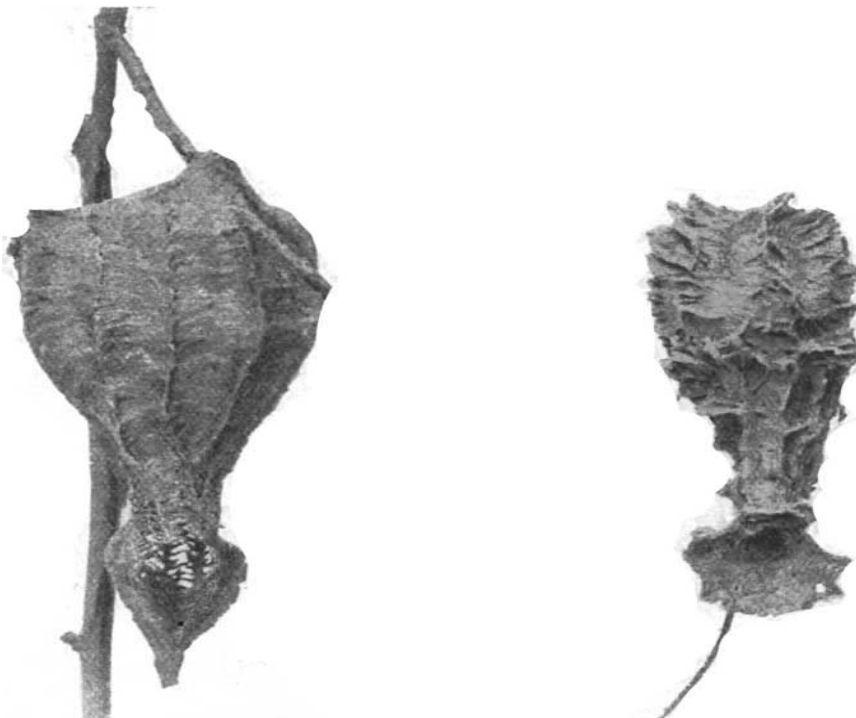
In revising this guide we would suggest that reference letters be given to Figs. 14 and 19; that the word *tibia* be added to the diagram in Fig. 18; and that the magnification of Figs. 40, 57, 58, 61, and 62 be indicated.

PROF. K. A. MÖBIUS.

PROF. KARL AUGUST MÖBIUS, for many years director of the Zoological Museum in Berlin, died on April 26 at the age of eighty-three. He was a notable naturalist, with a broad and cheerful outlook, greatly interested in the habits of creatures, and enthusiastic over their beauty. There are few zoologists who do not know "The Fauna of

the Bay of Kiel" by Möbius and Meyer, the two volumes of which form a rich storehouse of observations on the bionomics of a shallow sea. Möbius was probably the first to establish a salt-water aquarium in Germany, and he helped to start the famous zoological garden at Hamburg. He had, indeed, a strong practical sense, and made many useful suggestions in connection with fisheries, oyster-culture, and the harvest of the sea in general.

Möbius was born in 1825 at Eilenburg, in the Prussian province of Saxony; he was trained as a school teacher, but his enthusiasm and ambition were roused by reading the works of Alexander von Humboldt, and he went to Berlin, with a light purse, to study natural history. By giving lessons to others he was able to afford a university training, and he sat at the feet of men like Ehrenberg and Johannes Müller. He became assistant to Lichtenstein, who helped him in 1853 to a congenial teaching post in



Nests of species of *Ischnogaster*, nat. size. Photographed from specimens in the British Museum (Natural History).

activity of those who are responsible for its display, and although Mr. Charles O. Waterhouse informs us that "considerable time must necessarily elapse before the exhibited series of insects can be completed," and that the guide must be looked upon as a provisional one, yet in its present form it gives groups of properly organised facts which cannot fail to instruct and diffuse knowledge by making the study of these animals clearly interesting and accessible to the public.

A legible plan of the gallery is given, and bold reference numbers in the text will enable the visitor to find with facility any group of insects in which he may be specially interested. Where necessary models are given to illustrate the metamorphoses of various insects, and where possible species likely to be of in-

¹ "A Guide to the Exhibited Series of Insects in the Zoological Department (Insect Section), British Museum (Natural History), London." Pp. 59; with 62 illustrations. (Printed by Order of the Trustees, 1903.) Price 1s.

Hamburg, where he had time for faunistic studies. In 1868 he went to Kiel as professor of zoology, and it was there that he did what was probably his best work, which is embodied in great part in the book already referred to. He had his share of travel too, and made collections and observations of importance in Mauritius, the Seychelles, and elsewhere. In 1880 he had the pleasure of seeing the completion of the Zoological Museum and Institute at Kiel, to the organisation of which he had devoted himself wholeheartedly. In 1887 he was called to Berlin as director of the new Zoological Museum, a position which he held until the end of 1905. His first zoological paper was on "The Nests of Social Wasps." Of the many others, we may mention "Die Fauna der Kieler Bucht" (along with H. A. Meyer), "Beiträge zur Meeresfauna der Insel Mauritius und der Seychellen," "Die Fische der Ostsee," "Die Bildung, Geltung und Bezeichnung der Artbegriffe." He was particularly interested in marine creatures, in molluscs especially, but he ranged over a wide field, from alcyonarians to fishes. It is but a few months since his "Aesthetik der Tierwelt" was published, expressing with unabated enthusiasm his delight in the sea's endless progeny.

The Festschrift to Möbius with which his students honoured him on his eightieth birthday was an eloquent testimony to his efficiency as a teacher; the list of his papers—faunistic, bionomical, practical, and theoretical—suggests a strenuous life; and his position as president of the fifth International Congress of Zoologists in Berlin in 1901 was an indication of the esteem in which he was so widely held.

THE BRITISH MEMBERS OF THE INSTITUTE OF FRANCE.

THE subjoined address was presented to Monsieur Fallières, the President of the French Republic, at St. James's Palace, on Wednesday, May 27, at 11 a.m.

In the absence of Sir Joseph Hooker, the *doyen* of the British members of the Institute, who was elected in 1866, the address was presented by Sir Norman Lockyer (elected in 1873), with the following words:—
"En l'absence du *doyen* des membres de l'Institut de France dans ce pays, j'ai l'honneur de vous présenter cette adresse avec le plus profond respect.

"Les sentiments de fraternité ont été maintenus depuis plusieurs siècles entre les littérateurs, les savants et les artistes de la France et de l'Angleterre.

"Nous nous réjouissons qu'à présent tout le monde va suivre notre exemple."

The President made a sympathetic reply, fully acknowledging the importance of science and culture in bringing nations together and cementing their friendship.

The members of the various academies were then presented to the President, who cordially addressed a few words to each.

To the President of the French Republic.

SIR,—On the auspicious occasion of your visit to England we, the undersigned Associates and Correspondents of the Institute of France, desire to be permitted to offer to you an expression of our sincere respect. The intellectual pursuits to which that illustrious Institute is consecrated form some of the most potent and enduring bonds that link the nations together in peace and goodwill. As representatives of these pursuits in this country we are proud of our connection with the Institute of France, which has for so long been one of the great centres of culture in the world. We rejoice that the feelings of sympathy and

brotherhood which have for centuries been maintained between the cultivators of Literature, Science, and Art in France and Great Britain are now daily spreading more widely and deeply among the peoples of the two countries, and we are sure that your visit cannot but give a powerful stimulus to the progress of this peaceful and beneficent alliance. We desire to express the fervent hope that your tenure of the high office which you hold with such lustre and distinction may long continue to be prosperous.

We trust that you may be pleased to receive the assurance that the people of this country are heartily united in their sentiment of admiration and friendship for the people of France.

We have the honour to subscribe ourselves, with the deepest respect,

Your obedient servants,

1866. Sir Joseph Hooker, G.C.S.I., O.M., C.B.
F.R.S. 1900, A.
1873. Sir Norman Lockyer, K.C.B., F.R.S.
1874. Sir William Huggins, K.C.B., O.M., F.R.S.
1878. Whitley Stokes, C.S.I., C.I.E., F.B.A.
1891, A.
1881. Sir Lawrence Alma-Tadema, O.M., R.A.
1891, A.
1883. The Rev. R. Flint, D.D., LL.D.
1887. Sir John Evans, K.C.B., F.R.S.
1890. The Right Hon. Lord Rayleigh, P.C., O.M.,
Nobel Laureate, P.R.S.
1890. Sir Hubert von Herkomer, C.V.O., R.A.
1896, A.
1890. Sir E. Maunde Thompson, K.C.B., I.S.O.
P.B.A.
1891. Sir Archibald Geikie, K.C.B., F.R.S.
1891. The Right Hon. James Bryce, P.C., F.R.S.,
F.B.A. 1904, A.
1893. A The Right Hon. Lord Lister, P.C., O.M.,
F.R.S.
1903. Sir Frederick Pollock, Bart., F.B.A.
1903. Sir Henry Roscoe, F.R.S.
1894. R. W. Macbeth, R.A.
1895. Sir William Ramsay, K.C.B., Nobel Laureate,
F.R.S.
1896. Sir William M. Christie, K.C.B., F.R.S.
1896. Sir David Gill, K.C.B., F.R.S.
1898. Sir Edward Poynter, Bart., P.R.A.
1899. Sir Edwin Ray Lankester, K.C.B., F.R.S.
1901. A Sir William Q. Orchardson, R.A.
1901. J. S. Sargent, R.A. 1905, A.
1902. J. E. C. Bodley.
1902. The Right Hon. Lord Reay, P.C., G.C.S.I.,
G.C.I.E., F.B.A. 1906, A.
1903. John H. Lorimer, R.S.A.
1903. W. G. John, A.R.A.
1903. Edward Caird, LL.D., D.C.L.
1904. Stanhope A. Forbes, A.R.A.
1905. Arthur J. Evans, F.R.S., F.B.A.
1905. Sir Francis Seymour Haden, P.R.S.P.E.
1905. Barclay Vincent Head, D.Litt., D.C.L., Ph.D.
1905. Richard Phené Spiers, F.R.I.B.A., F.S.A.
1906. Sir William Crookes, F.R.S.
1907. Sir George Darwin, K.C.B., F.R.S.
1907. The Right Hon. Lord Brassey, G.C.B.
1908. The Right Hon. A. J. Balfour, M.P., F.R.S.
1908. E. A. Abbey, R.A.

The following is a French translation of the Address:—

A son Excellence, Monsieur Fauvères, Président de la République Française.

MONSIEUR LE PRÉSIDENT,—Nous saisissons avec empressement l'occasion de votre visite officielle à Londres pour vous prier, en notre qualité de Membres associés et correspondants de l'Institut de France, de vouloir bien accepter l'expression de nos plus respectueux hommages.

Les Arts et les Sciences au progrès desquels se